

## CLAIMS

1. A method for producing a porous film wherein a porous film of a poly(vinylidene fluoride) based resin is prepared by dissolving the poly(vinylidene fluoride) based resin in a poor solvent through heating to form a liquid raw material for a film, and then cooling the liquid raw material to bring about a phase separation, characterized in that an organized clay being organized by a hydrophilic compound is dispersed in said liquid raw material for a film in an amount of 1 to 25 parts by weight relative to 100 parts by weight of the poly(vinylidene fluoride) based resin.

2. The method for producing a porous film according to claim 1, wherein the temperature of said liquid raw material for a film before cooling is 170°C or above and lower than the thermal decomposition temperature of the poly(vinylidene fluoride) based resin.

3. A porous film comprising a poly(vinylidene fluoride) based resin and an organized clay being organized by a hydrophilic compound, the organized clay being dispersed therein in an amount of 1 to 25 parts by weight relative to 100 parts by weight of the poly(vinylidene fluoride) based resin, wherein a microstructure is formed by a thermally induced phase separation method, said microstructure having an irregularly shaped resin phase continuous in a three-dimensional manner and having irregularly shaped pore

**spaces therebetween.**

- 4. The porous film according to claim 3, wherein said  
organized clay is a clay prepared by organizing a layered inorganic  
5 silicate with an alkylene oxide compound.**